

## Luminometric determination of mutagenic or carcinogenic activity

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### Abstract

Luminometric determination of the mutagenic and/or carcinogenic (or more generally genotoxic) power of a test sample (and/or of an active agent in the sample) uses a microorganism having an SOS system and involves measuring bioluminescence induced by nucleic acid-damaging agents (A) in the sample through induction of SOS system. The microorganisms used are transformed with a plasmid containing the lux operon of a photobacterium which is activated, under control of the SOS system, by interaction with (A). The genes of the operon are thus expressed and their expression products generate bioluminescence.

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